REMARKS

In the Office Action mailed February 4, 2005, the Examiner noted that claims 1-20 were pending, objected to claims 13 and 20, and rejected claims 1-12 and 14-19. Claims 1, 7, 13, 19 and 20 have been amended, new claims 20 and 21 have been added and, thus, in view of the forgoing claims 1-21 remain pending for reconsideration which is requested. No new matter has been added. The Examiner's rejections and objections are traversed below.

In the Office Action, the Examiner objected to claims 13 and 20 and indicated that these claims would be allowable if rewritten in independent form. These claims have been so rewritten and it is submitted that these claims have not been narrowed and have the same scope as prior to being made independent and are now allowable. Withdrawal of the objection is requested.

In the Office Action the Examiner rejected claim 19 under 35 U.S.C. section 112 paragraph 2 as indefinite. Claim 19 has been amended in consideration of the Examiner's comment and it is submitted it satisfies the requirements of the statute. If additional concerns with the claims arise, the Examiner is invited to telephone to resolve the same. Suggestions by the Examiner are also welcome. Withdrawal of the rejection is requested.

On page 2 of the Action the Examiner rejected claims 5 and 17 under 35 U.S.C. section 112, paragraph 1 for failure to comply with the written description requirement alleging that the application is deficient with respect to how command torques are altered in accordance with object material, shape or weight. A specification is written for those of ordinary skill in the art, not the layman. It is submitted that those of ordinary skill in the art would know how to alter command torques for robot hand fingers in accordance with object material, shape or weight. Withdrawal of the rejection is respectfully requested.

On page 3 of the Office Action, the Examiner rejected claim 1 under 35 U.S.C. § 102 as anticipated by DiStasio.

DiStasio discusses a system that includes two imaging systems 6 and 8. The imaging systems are fixed to move with the manipulator (see for example, col. 4, lines 10-17). In contrast the invention of claim 1 emphasizes that the detecting means is associated with a movable device movable independently of the robot. This provides distinct viewing advantages over DiStasio. In particular, the detecting means is movable to a position where the position/orientation of an object held by the robot hand relative to the robot hand can be precisely detected. The prior art does not provide or suggest such.

Page 4 of the Office Action rejects claims 1-12 and 14-19 under 35 U.S.C. § 103 "... over Lemelson '290 in view of newly cited DiStasio et al." The Examiner is requested to clarify the basis for this rejection. The Examiner has stated with respect to claim 7 "... the camera in

Lemelson as modified by Joyce ...". Joyce is not mentioned in the rejection as quoted above. Are the claims being rejected over a combination of Lemelson and DiStasio or Lemelson and Joyce or Lemelson, DiStasio and Joyce? Clarification is requested.

Nevertheless, the present invention (see claims 1, 7 and 19) associates the hand relative position detection with a movable device movable independently of the robot. Lemelson adds nothing to DiStasio with respect to this feature of the present invention.

It is submitted that the invention of the independent claims distinguishes over the prior art and withdrawal of the rejection is requested.

The dependent claims depend from the above-discussed independent claims and are patentable over the prior art for the reasons discussed above. The dependent claims also recite additional features not taught or suggested by the prior art. For example, claim 11 emphasizes that a 3D visual sensor is used as the second detecting means. The Examiner has pointed to nothing in the prior art which teaches, suggests or motivates such. The Examiner is requested to review MPEP sections 2142-2144 on this issue. It is submitted that the dependent claims are independently patentable over the prior art.

New claims 21 and 22 emphasize that a second sensor associated with a second robot is used relative to the object and first robot hand position. Nothing in the prior art teaches or suggests such. It is submitted that these new claims, which are different and not narrower than prior filed claims distinguish over the prior art.

It is submitted that the claims satisfy the requirements of 35 U.S.C. 112. It is also submitted that claims 13 and 20 continue to be allowable. It is further submitted that the claims are not taught, disclosed or suggested by the prior art. The claims are therefore in a condition suitable for allowance. An early Notice of Allowance is requested.

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If any further fees, other than and except for the issue fee, are necessary with respect to this paper, the U.S.P.T.O. is requested to obtain the same from deposit account number 19-3935.

Respectfully submitted,

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